

RATITE SLAUGHTER INSPECTION GUIDELINES

I. GENERAL REQUIREMENTS

A. Passing of carcasses and parts

1. Ante-mortem:

- (a) Each individual ratite will be inspected on ante-mortem by observing the animal from both sides at rest and in motion.
- (b) An Identification Tag Ante-Mortem, Form FSIS 6150-1, will be completed for each suspect.
 - (1) Exception: A separate form is not necessary for each ratite with leg deformities which are not caused from trauma. However, affected birds shall be segregated into separate lots; condition and number of birds shall be recorded on the form.
 - (2) Although only one form is completed for each different condition in a lot, such birds must be handled as suspects. When slaughtered, they must be individually identified with a multi-sectioned "U.S. Retained" tag, and recorded as suspects on the Daily Disposition Record, form FSIS-6200-14.

2. Post-mortem:

- (a) Each ratite carcass and all viscera will receive a thorough post-mortem examination including observing, palpating and incising to the extent necessary to make a determination whether to pass, suspect, or condemn the animal.
- (b) Each carcass, including all parts thereof, in which there is any lesion of disease, or other condition which might render such carcass or any part thereof adulterated shall be held for further examination. The identity of each such carcass, including all parts thereof, shall be maintained until a final examination by the FSIS veterinarian has been completed.
- (c) Each carcass and all organs and other parts of carcasses which are found to be not diseased/adulterated or naturally inedible shall be passed for human food.
- (d) The carcasses or parts of carcasses of all ratites inspected at an official establishment and found at the time of post mortem inspection, or at any subsequent inspection, to be affected with any of the diseases or conditions named in other sections in this guideline, shall be disposed of in accordance with the section pertaining to the disease or condition. Owing to the fact that it is impracticable to formulate rules for each specific disease or condition and to designate at just what stage a disease process results in an adulterated carcass or part, the decision as to the disposal of all carcasses, organs or other parts not

specifically covered by the guidelines, or by instructions issued pursuant thereto, shall be left to the FSIS veterinarian, and if the FSIS veterinarian is in doubt concerning the disposition to be made, specimens from such carcasses shall be forwarded to the Inspection Service laboratory for histopathological and/or microbiological diagnosis.

3. Sanitizing equipment:

(a) Implements contaminated by contact with carcasses affected with any of the disease conditions mentioned in this guideline shall be thoroughly cleaned and sanitized between carcasses.

(b) The equipment used in the dressing of such carcasses, such as viscera trucks or inspection tables, shall be sanitized with hot water having a minimum temperature of 180 degrees F.

4. Contamination:

(a) Carcasses or parts of carcasses contaminated by contact with such diseased carcasses shall be condemned unless all contaminated tissues are removed promptly.

5. Retained Product

(a) When product is retained for further inspection, identity and wholesomeness should be preserved. Identity can be maintained by keeping product under Government lock or seal, and/or by using retained tags. Product wholesomeness can be maintained by preventing contamination, dehydration, and decomposition with plastic bags or other refrigeration or freezing means. If necessary, samples of retained product may be sent to the laboratory.

II. ANTE-MORTEM

A. Official marks and devices for purposes of ante-mortem inspection.

1. All ratites required to be identified as U.S. Suspects shall be tagged by plant personnel with a serially numbered metal or plastic leg band or tag bearing the term "U.S. Suspect" except that ratites affected with conditions to the extent that the lesions would be readily detected on post-mortem inspection, need not be individually tagged on ante-mortem inspection with the U. S. Suspect tag provided that such ratites are segregated and otherwise handled as U.S. Suspects.

2. All ratites required by this part to be identified as U.S. Condemned shall be tagged with a serially numbered metal or plastic leg band or tag bearing the term "U. S. Condemned. "

B. Condemned - Dead, dying, disabled, or diseased ratites.

1. When ante-mortem inspection of abnormal animals reveals a dying condition, a disease or condition that may require carcass condemnation on post-mortem inspection, or a disease or condition requiring further observation or treatment, such animals must be identified as "U.S. Condemned" and must be withheld from slaughter.

(a) Condemned animals must be tagged "U. S. Condemned," and must either be promptly and humanely killed by plant employees and disposed of as required, or must be held for observation and/or treatment in separate, identified facilities on the official premises. Following recovery, they may be reexamined by an FSIS veterinarian. If normal, they may be passed for slaughter as suspects.

(1) Dead-on-arrival (DOA) carcasses will be tagged "U.S. Condemned" and disposed of in a manner that precludes their use as human food.

C. Suspects - Ratites suspected of being diseased or affected with certain conditions; identifying suspects; disposition on post-mortem inspection or otherwise.

1. Ratites showing signs of abnormalities or diseases shall be segregated into designated suspect pens for examination by an FSIS veterinarian.

2. Ratites which, on ante-mortem inspection, do not clearly show, but are suspected of being affected with any disease or condition that may cause condemnation of the carcass on post-mortem inspection, and any ratite which shows, on ante-mortem inspection, any disease or condition that would cause condemnation of any part of the carcass on postmortem inspection, shall be slaughtered and retained as a suspect until it is given final post-mortem inspection by an FSIS veterinarian.

3. Ratites identified as "U.S. Suspect" are slaughtered in the inspector's presence.

4. Ratites are to be withheld from slaughter when there is evidence to indicate the presence of zoonotic disease, including but not limited to erysipelas, *Chlamydia psittaci* (ornithosis), anthrax, *Salmonella*, or viral encephalitis.

5. Ratites with signs of abnormalities or diseases--dirty, ruffled feathers; swollen sinuses; eye and/or nostril discharge; diarrhea; swellings; lameness; ascites; cachexia, etc.--shall be handled as suspects. Each suspect may be retained and slaughtered at the end of the day's operation, if practicable and adequate facilities are available.

6. DOWNERS - All seriously crippled animals and animals commonly termed "downers," shall be identified as U. S. Suspects. All downers, including those showing signs of trauma, shall be examined by an FSIS veterinarian. Nature and extent of the examination shall be sufficient to determine whether they should be

condemned, passed for slaughter as suspects, or held for further observation. Carcass disposition for those passed for slaughter shall be based on ante- and post-mortem findings and, when necessary, on laboratory results.

7. Poisoning (drug, chemical) - Animals exhibiting signs of drug or chemical poisoning shall be withheld from slaughter. The Regional Director and Inspection Operations shall be immediately notified as to history and number of animals, signs, and other pertinent information.

8. Reportable Diseases - In case of a suspected reportable disease, the Inspector-in-Charge shall: immediately notify plant management, obtain history, and inform (by telephone through Area Supervisor) appropriate Federal and State officials.

(a) Ratites with or suspected of having a communicable disease may be removed from the plant at owner's request with the approval of the appropriate Federal or State authority. However, they are subject to Federal and State laws on disease control and eradication.

III. POST-MORTEM

A. Airsacculitis

1. Carcasses of ratites with evidence of extensive involvement of the air sacs with airsacculitis or those showing airsacculitis along with systemic changes shall be condemned. Less affected carcasses may be passed for food after complete removal and condemnation of all affected tissues including the exudate. The femur is the only pneumatic bone in ratites.

B. Anemia

1. Carcasses of ratites too anemic to produce wholesome meat shall be condemned.

C. Anthrax - carcasses not to be eviscerated; disposition of affected carcasses; hides, feathers, viscera and contents, and fat; handling of blood; general cleanup and disinfection.

1. Carcasses found before evisceration to be affected with anthrax shall not be eviscerated but shall be retained, condemned, and immediately tanked or otherwise disposed of in a manner that precludes use as human food;

2. All carcasses and all parts, including hides, feathers, viscera and contents, blood, and fat of any ratite found to be affected with anthrax shall be condemned and immediately disposed of, except that the blood may be handled through the usual blood cooking and drying equipment.

3. Any part of any carcass that is contaminated with anthrax-infected material through contact with soiled instruments or otherwise shall be immediately condemned and disposed of in a manner that precludes use as human food.

4. That portion of the slaughtering department, including the bleeding area, gambrelling bench, floors, walls, posts, platforms, saws, cleavers, knives, and hooks, as well as employees' boots and aprons, contaminated through contact with anthrax-infected material, shall, be cleaned immediately and disinfected with one of the following disinfectants or other disinfectant:

(a) A list of disinfectants approved for this purpose is available upon request to:

Scientific Services
Meat and Poultry Inspection
Food Safety and Inspection Service
U.S. Department of Agriculture
Washington, D.C. 20250

(b) Approved specifically for this purpose by the Administrator:

(1) A 5 percent solution of sodium hydroxide or commercial lye containing at least 94 percent of sodium hydroxide. The solution shall be freshly prepared immediately before use by dissolving 2 and ½ pounds of sodium hydroxide or lye in 5 and ½ gallons of hot water and shall be applied as near scalding hot (212 degrees F) as possible to be most effective.

(Owing to the extremely caustic nature of sodium hydroxide solution, precautionary measures such as the wearing of rubber gloves and boots to protect the hands and feet, and goggles to protect the eyes, should be taken by those engaged in the disinfection process. It is also advisable to have an acid solution, such as vinegar, in readiness in case any of the sodium hydroxide solution should come in contact with any part of the body.)

(2) A solution of sodium hypochlorite containing approximately one-half of 1 percent (5,000 parts per million) of available chlorine. The solution shall be freshly prepared.

(c) When a disinfectant solution has been applied to equipment which will afterwards contact product, the equipment shall be rinsed with potable water before such contact.

D. Arthritis

1. Carcasses affected with arthritis which is localized and not associated with systemic change may be passed for human food after removal and condemnation of all affected parts.

Affected joints shall be removed and condemned. In order to avoid contamination of the meat which is passed, a joint capsule shall not be opened until after the affected joint is removed.

2. Carcasses affected with arthritis shall be condemned when there is evidence of systemic involvement.

E. Biological residues

1. Carcasses, organs, or other parts of carcasses of ratites shall be condemned if it is determined that they are adulterated because of the presence of any biological residues.

2. Ratites suspected of having been treated with or exposed to any substance that may impart a biological residue which would make the edible tissues unfit for human food or otherwise adulterated shall be identified at official establishments as "U. S. Condemned. " These ratites may be held under the custody of a Program employee, or other official designated by the Administrator, until metabolic processes have reduced the residue sufficiently to make the tissues fit for human food and otherwise not adulterated. When the required time has elapsed, the ratite, if returned for slaughter, must be re-examined on ante-mortem inspection. To aid in determining the amount of residue present in the tissues, officials of the Program may permit the slaughter of any such ratite for the purpose of collecting tissues for analysis for the residue. Such analysis may include the use of in-plant screening procedures designed to detect the presence of antimicrobial residues.

3. All carcasses and edible organs and other parts thereof, in which are found any biological residues which render such articles adulterated, shall be marked as "U.S. Condemned" and disposed of in a manner acceptable to the Agency and shall be kept separate from all other condemned carcasses or parts.

F. Bruises

1. Any part of a carcass which is badly bruised shall be condemned and, if the whole carcass is affected as a result of the bruise, the whole carcass shall be condemned. Parts of a carcass which show only slight reddening from a bruise may be trimmed and passed for food.

G. Cadavers

1. Carcasses of ratites showing evidence of having died from causes other than slaughter shall be condemned.

H. Carcasses with renal, splenic, hepatic pathology

1. Carcasses shall be retained for examination by an FSIS veterinarian when presented with renal or splenic pathology, hepatic lesions causing liver condemnation, or conditions requiring condemnations of all viscera.

I. Central Nervous System disorders

1. Animals with central nervous system disorders-- depression, drowsiness, weakness, coma, staggering, circling, muscular tremors, etc.--shall be condemned.

J. Contamination

1. At the time of any inspection each carcass, or any part thereof, which is found to be adulterated shall be condemned, except that any such articles which may be made not adulterated by reprocessing, need not be so condemned if so reprocessed under the supervision of an inspector and thereafter found to be not adulterated.

2. Any carcass of ratite accidentally contaminated during slaughter with digestive tract contents shall not be condemned if promptly reprocessed under the supervision of an inspector and thereafter found not to be adulterated. Contaminated surfaces shall be removed only by trimming.

3. Carcasses of ratites contaminated by volatile oils, paints, poisons, gases, or other substances which render the carcasses adulterated shall be condemned. Any organ or other part of a carcass which has been accidentally mutilated in the course of processing shall be condemned, and if the whole carcass is affected, the whole carcass shall be condemned

K. Decomposition

1. Carcasses of ratites deleteriously affected by post mortem changes shall be disposed of as follows:

(a) Carcasses which have reached a state of putrefaction or stinking fermentation shall be condemned.

(b) Carcasses affected by types of post-mortem change which are superficial in nature may be passed for human food after removal and condemnation of the affected parts.

L. Drug withdrawal

1. Animals that received a drug or chemical and are presented for slaughter before the required withdrawal period is completed must be withheld from slaughter until such period elapses.

M. Emaciation

1. Carcasses of ratites too emaciated to produce wholesome meat, and carcasses which show a serous infiltration of muscle tissue, or a serous or mucoid degeneration of the fatty tissues, shall be condemned. A gelatinous change of the

fat of the heart of well-nourished carcasses and mere leanness shall not be classed as emaciation.

N. Emergency Slaughter

1. Sick, dying, or animals treated with a drug or chemical and presented for slaughter before the required withdrawal period are not covered by emergency slaughter provisions.
2. When it is necessary for humane reasons to slaughter an injured animal at night or on Sunday or a holiday when the inspector cannot be obtained, the carcass and all parts shall be kept for inspection, with the head and all viscera except the gastrointestinal tract held by the natural attachment. If all parts are not so kept for inspection, the carcass shall be condemned. If, on inspection of a carcass slaughtered in the absence of an inspector, any lesion or other evidence is found indicating that the animal was sick or diseased, or affected with any other condition requiring condemnation of the animal on ante-mortem inspection, or if there is lacking evidence of the condition which rendered emergency slaughter necessary, the carcass shall be condemned.

O. Escaped animals; control

1. Tranquilizers are not approved for use on animals destined to slaughter. If a tranquilizer was used, the veterinary medical officer will consult Residue Operations through channels for handling and disposition of involved animal(s).

P. Inflammatory conditions

1. Any organ or other part of a carcass which is affected by inflammation shall be condemned; when the lesions are of such character or extent as to affect the whole carcass, the whole carcass shall be condemned

Q. Kidney Condemnation

1. All kidneys shall be condemned following inspection.

R. Liver Condemnation

1. Livers with the following diseases or abnormalities must be condemned: Inflammation, abscess, necrosis, cirrhosis, or tumor; livers with one large cyst or several small cysts; discoloration--caused by bile duct disorders, post mortem changes, etc; enterohepatitis; contamination--from intestinal contents or noxious materials.

S. Lung disposition

1. Ratite lungs shall not be saved for use as human food. They shall be maintained under inspectional control until properly disposed of.

2. Lungs found to be affected with disease or pathology and lungs found to be adulterated with chemical or biological residue shall be condemned and identified as "U.S. Inspected and Condemned." Condemned lungs may not be saved for pet food or other nonhuman food purposes.

3. Lungs not condemned under this section may be denatured and used in the preparation of pet food or for other nonhuman food purposes at the official establishment, or they may be distributed from the establishment in commerce, or otherwise, for nonhuman food purposes or they may be so distributed to pharmaceutical manufacturers for pharmaceutical use, if they are labeled as "Inedible Ratite Lungs -- for Pharmaceutical Use Only."

T. Muscular inflammation, degeneration, or infiltration

1. If muscular lesions are found to be distributed in such a manner or to be of such character that removal is impractical, the carcass shall be condemned.

2. If muscular lesions are found to be distributed in such a manner or to be of such character that removal is practical, the following rules shall govern the disposal of the carcasses, edible organs and other parts of carcasses showing such muscular lesions:

(a) If the lesions are localized in such a manner and are of such a character that the affected tissues can be removed, the unaffected parts of the carcass may be passed for human food after the removal and condemnation of the affected portion.

(b) If a part of the carcass shows numerous lesions, or if the character of the lesion is such that complete extirpation is difficult and uncertainly accomplished, or if the lesion renders the part in any way unfit for human food, the part shall be condemned.

(c) If the lesions are slight or of such character as to be insignificant from a standpoint of wholesomeness, the carcass or parts may be passed for use in the manufacture of comminuted cooked product, after removal and condemnation of the visibly affected portions.

U. Myiasis

1. Animals with wounds infested with maggots must be segregated and maggot specimens taken to identify possible screwworm infestation

V. Neoplasms

1. An individual organ or other part of a carcass affected with a neoplasm shall be condemned.

2. If there is evidence of metastasis or that the general condition of the animal has been adversely affected by the size, position, or nature of the neoplasm, the entire carcass shall be condemned.
3. Carcasses of ratites affected with any one or more of the several forms of the avian leukosis complex shall be condemned.

W. Nutritional problems

1. The long bones of ratites may exhibit changes due to hormonal imbalance, nutritional deficiency or excess (osteomyelosclerosis in laying birds). Carcasses showing such bony changes with no other pathology may be passed for food.
2. Lesions resulting from visceral gout, chalk-like deposits in joints, pleura, etc., shall be removed by trimming. Carcasses with visceral gout lesions distributed in such a manner or extent that removal is impossible or impractical shall be condemned.

X. Parasites

1. Organs or other parts of carcasses which are found to be infested with parasites, or which show lesions of such infestation shall be condemned and, if the whole carcass is affected, the whole carcass shall be condemned.

Y. Pigmentary conditions

1. Carcasses of ratites showing generalized pigmentary deposits shall be condemned.
2. The affected parts of carcasses showing localized pigmentary deposits of such character as to be unwholesome or otherwise adulterated shall be removed and condemned.
3. Any part of a carcass which is green struck shall be condemned and, if the carcass is so extensively affected that removal of affected parts is impracticable, the whole carcass shall be condemned.

Z. Research animals presented for slaughter

1. No ratite used in any research investigation involving an experimental biological product, drug, or chemical shall be eligible for slaughter at an official establishment unless:
 - (a) The operator of such establishment, the sponsor of the investigation, or the investigator has submitted to the Program, or the Veterinary Services unit of the Animal and Plant Health Inspection Service of the Department of Agriculture or to the Environmental Protection Agency or to the Food and Drug Administration of the Department of Health and Human Services, data or a summary evaluation of

the data which demonstrates that the use of such biological product, drug, or chemical will not result in the products of such ratite being adulterated, and a Program employee has approved such slaughter;

(b) Written approval by the Deputy Administrator, Meat and Poultry Inspection Field Operations is furnished the area supervisor prior to the time of slaughter;

(c) In the case of an animal administered any unlicensed, experimental veterinary biologic product regulated under the Virus-Serum Toxin Act (21 U.S.C. 151 et seq.), the product was prepared and distributed in compliance with [Part 103 of the regulations issued under said Act (Part 103 of this title), and used in accordance with the labeling approved under said regulations];

(d) In the case of an animal administered any investigational drug regulated under the Federal Food, Drug, and Cosmetic Act, as amended [(21 U.S.C. 301 et seq.), the drug was prepared and distributed in compliance with the applicable provisions of Part 135 of the regulations issued under said Act (21 CFR Part 135), and used in accordance with the labeling approved under said regulations];

(e) In the case of an animal subjected to any experimental economic poison [under section 2(a) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 U.S.C. 135 et seq.), the product was prepared and distributed in accordance with 362.17 of the regulations issued under said Act (7 CFR 362.17), and used in accordance with the labeling approved under said regulations].

(f) In the case of an animal administered or subjected to any substance that is a food additive or pesticide chemical under the Federal Food, Drug, and Cosmetic Act, supra, there has been compliance with all tolerance limitations established by said Act and the regulations promulgated thereunder (21 CFR 1.1 et seq.), and all other restrictions and requirements imposed by said Act and said regulations will be complied with at the time of slaughter.

2. The inspector in charge may deny or withdraw the approval for slaughter of any ratite subject to the provision of this section when he deems it necessary to assure that all products prepared at the official establishment are free from adulteration.

AA. Synovitis

1. Inflammation of synovial membranes, caused by injury, nutritional deficiency and/or micro-organisms. Synovitis may involve one or all synovial membranes and adjacent tissues, and may be associated with lesions in one or more organs.

2. Swollen joints from mechanically impaired circulation should not be confused with synovitis. Carcasses with localized synovitis may be passed for food after removal of affected tissues; those with systemic change shall be condemned.

BB. Systemic Condition - septicemia or toxemia

1. All carcasses of animals so infected that consumption of the products thereof may give rise to food Poisoning shall be condemned. This includes all carcasses showing signs of:

(a) Acute inflammation of the lungs, pleura, pericardium, peritoneum, or meninges.

(b) Carcasses of ratites showing evidence of any septicemic or toxemic disease, or showing evidence of an abnormal physiologic state, shall be condemned.

(c) Gangrenous or severe hemorrhagic enteritis or gastritis.

(d) Septic traumatic pericarditis.

(e) Egg peritonitis or bacterial enteritis.

2. When a systemic condition is evident, carcass and viscera must be condemned.

CC. Tuberculosis

1. Carcasses of ratites affected with tuberculosis shall be condemned.